

COMPUTER-AIDED PROGRESSIVE DIE
DESIGN SYSTEM AND METHOD

Inventor: Shengming Liu

FIG. 1A

1/9

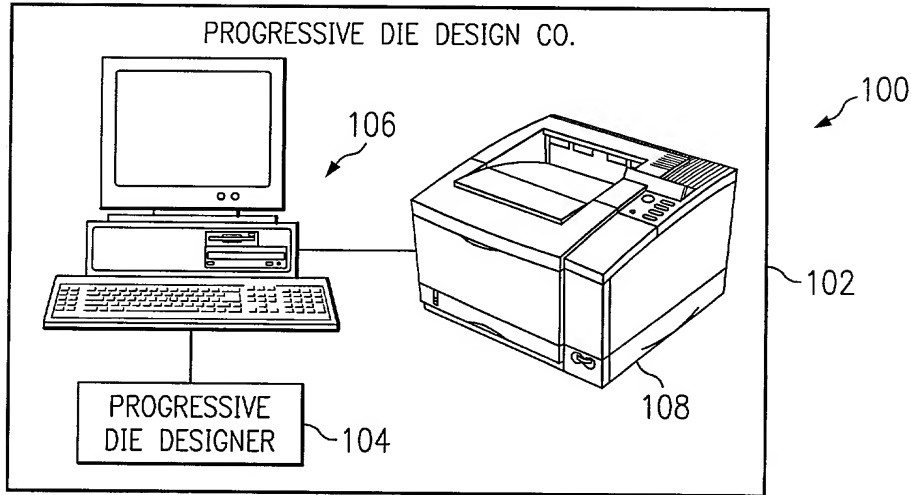
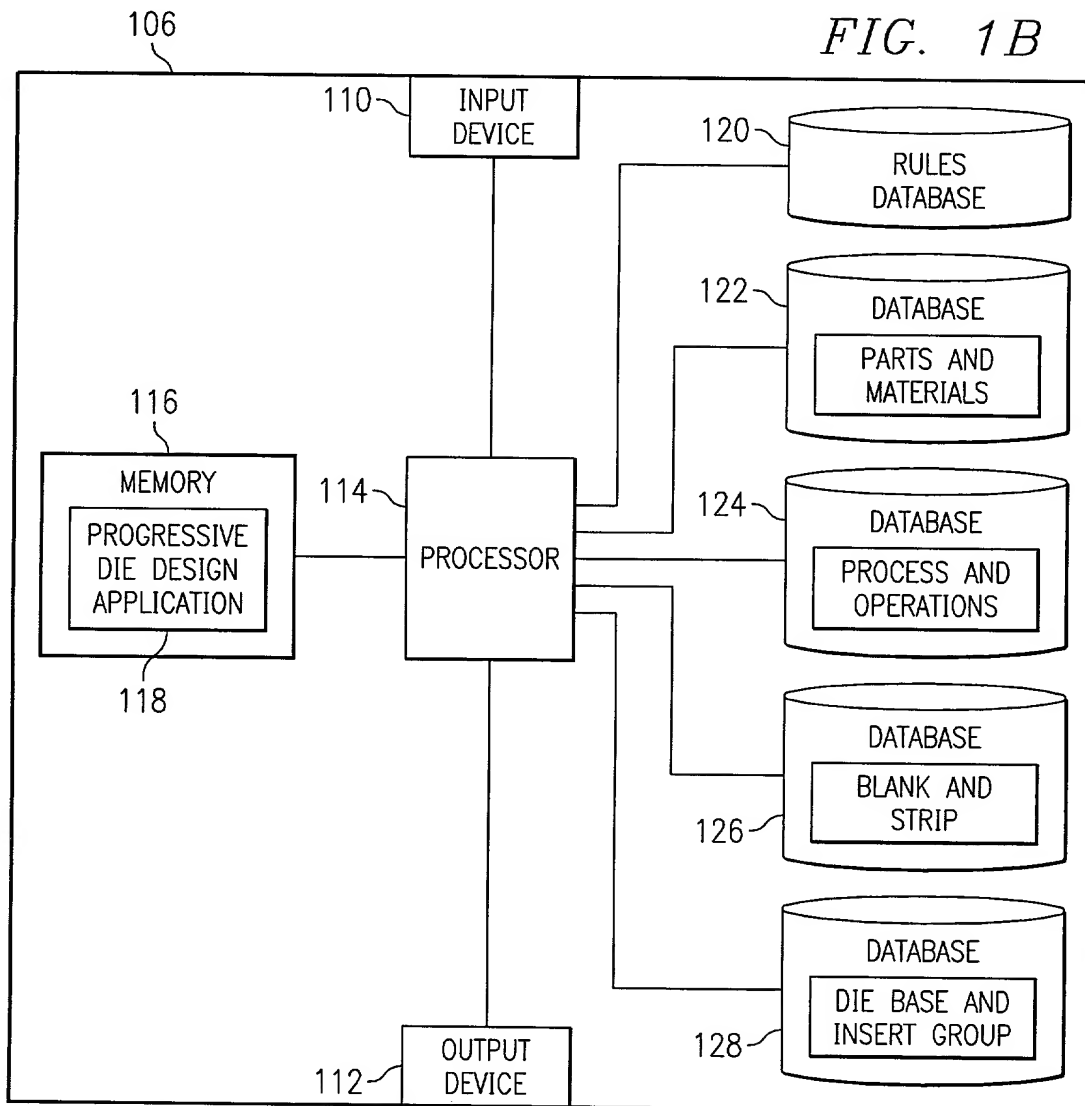


FIG. 1B



COMPUTER-AIDED PROGRESSIVE DIE
DESIGN SYSTEM AND METHOD

Inventor: Shengming Liu

2/9

FIG. 2

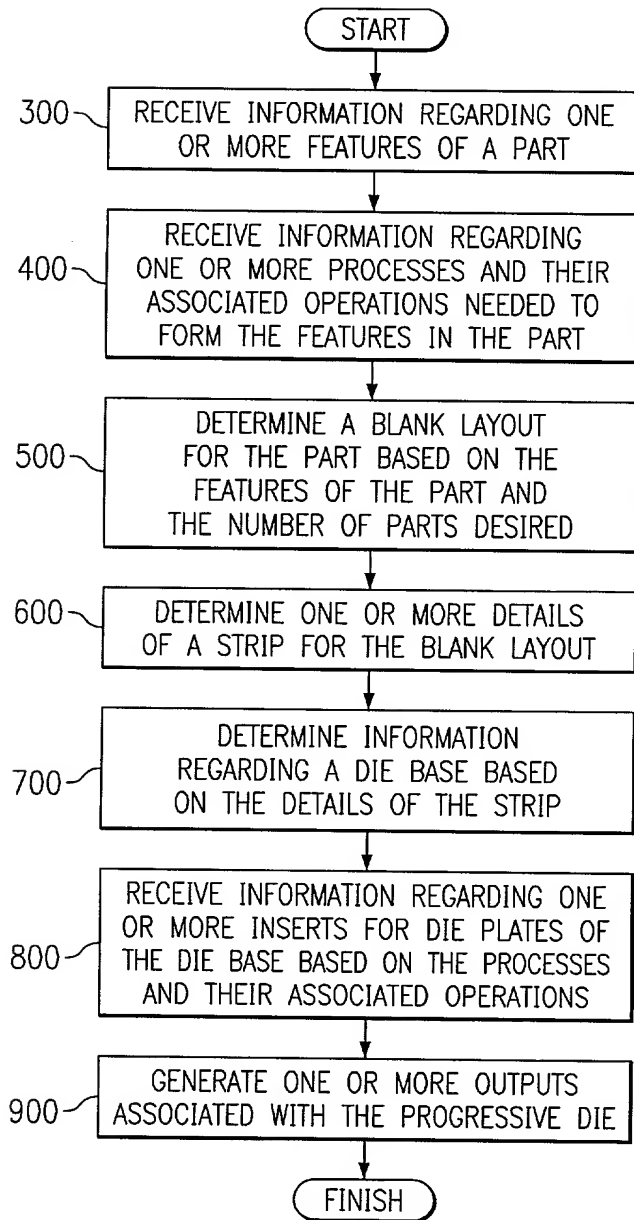
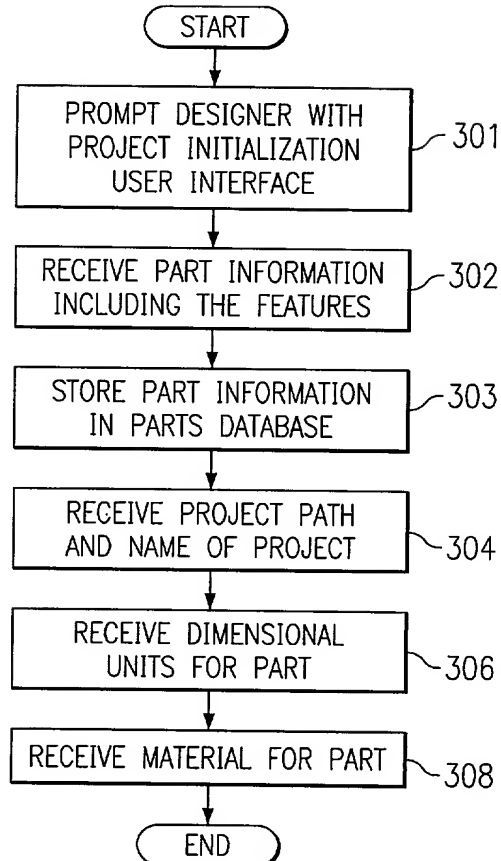


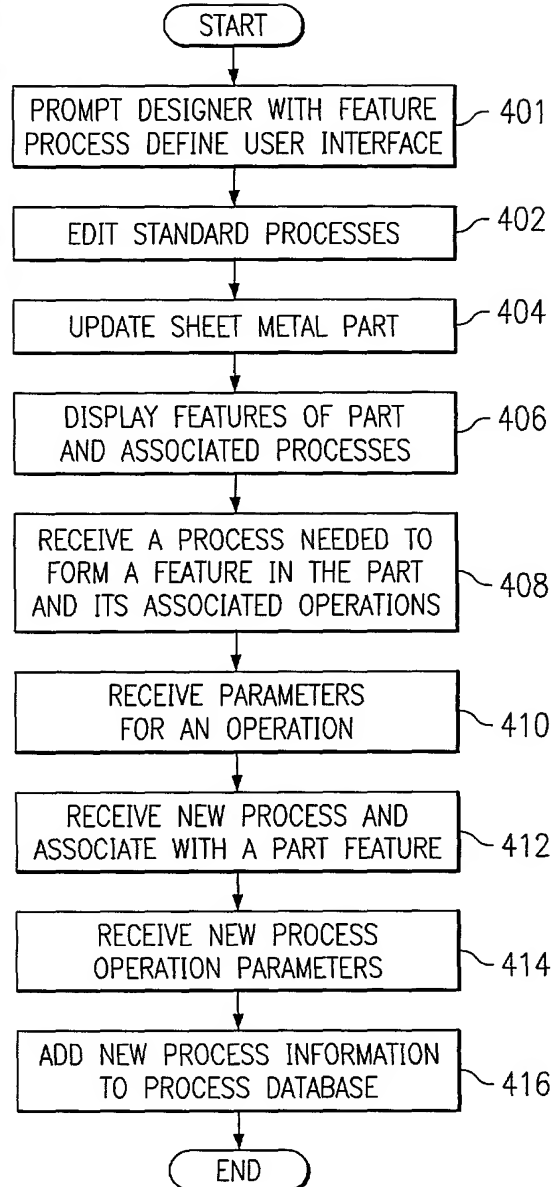
FIG. 3A



350

FIG. 3B

FIG. 4A



COMPUTER-AIDED PROGRESSIVE DIE
DESIGN SYSTEM AND METHOD

Inventor: Shengming Liu

FIG. 4B

4/9

450

FIG. 4C

460

FIG. 5A

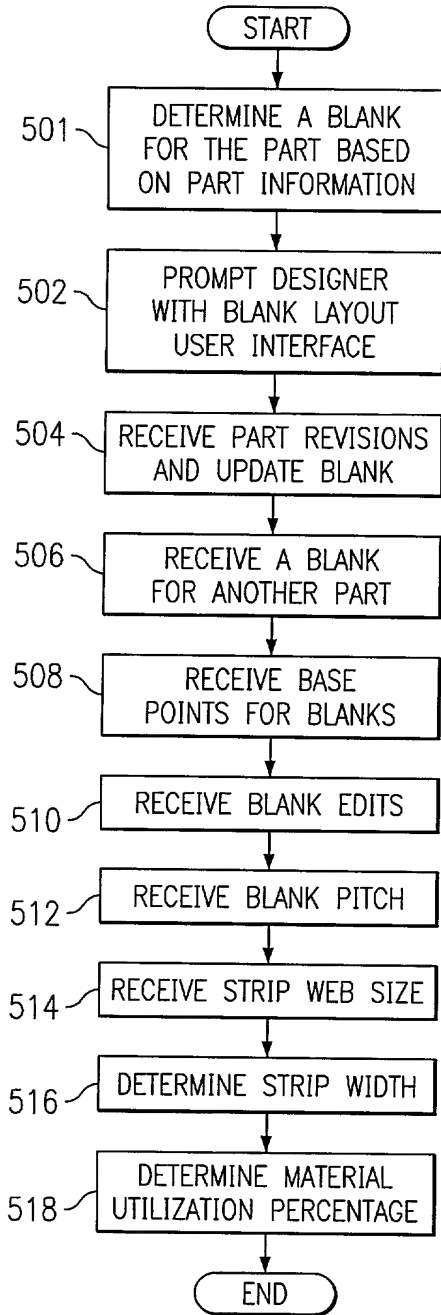
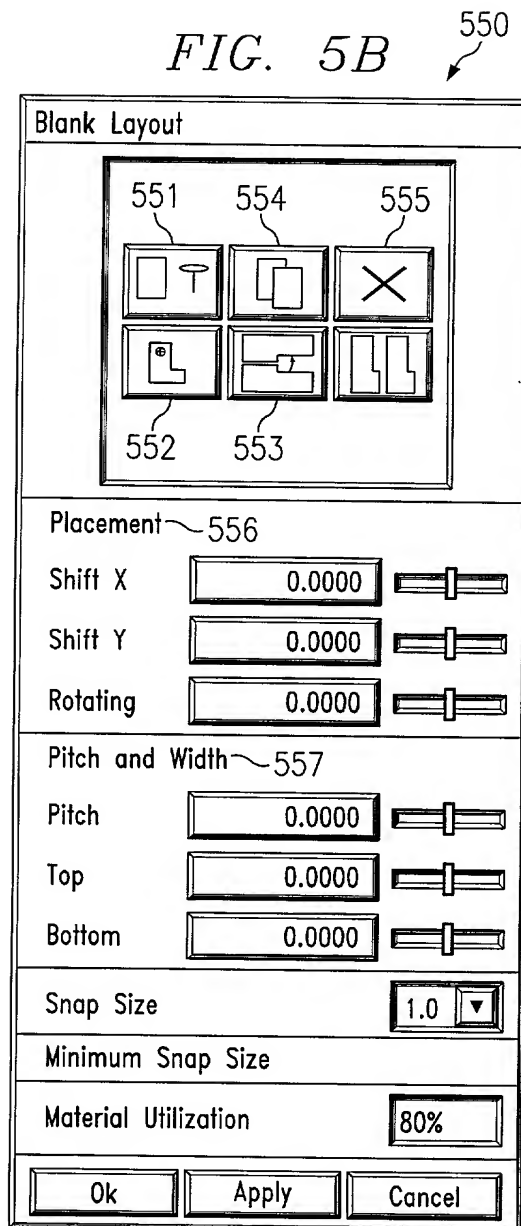


FIG. 5B



6/9

FIG. 6A

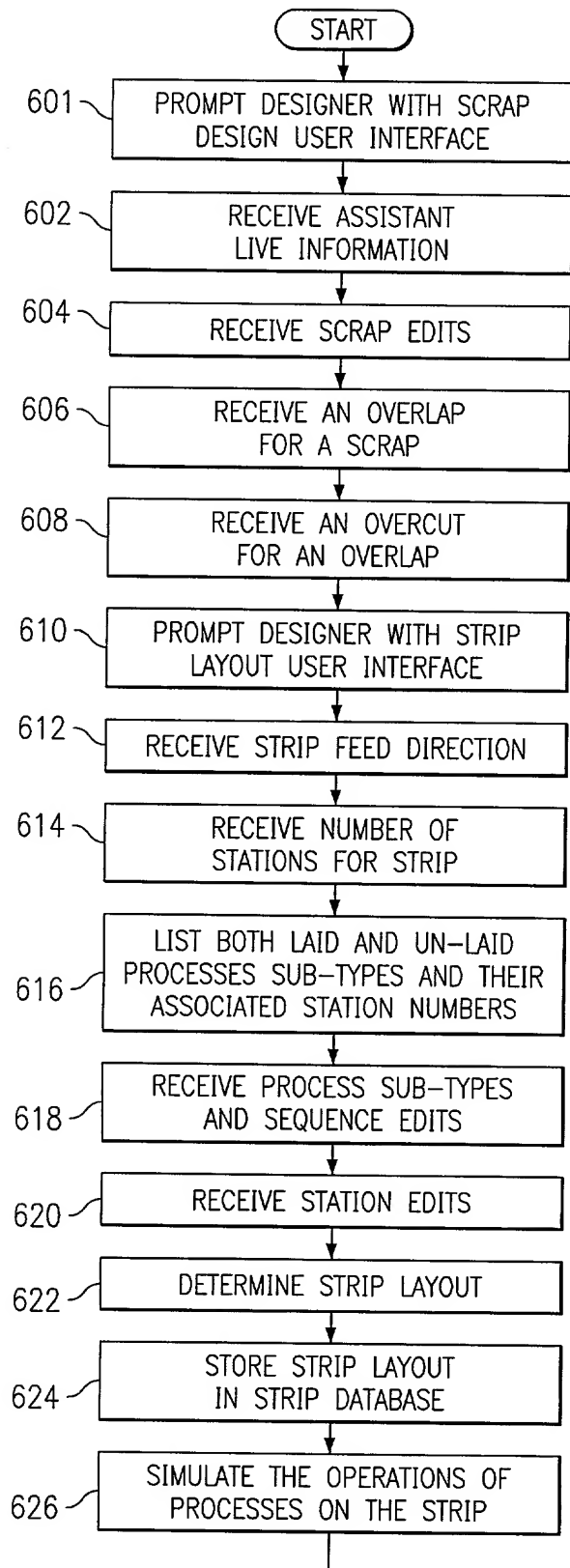
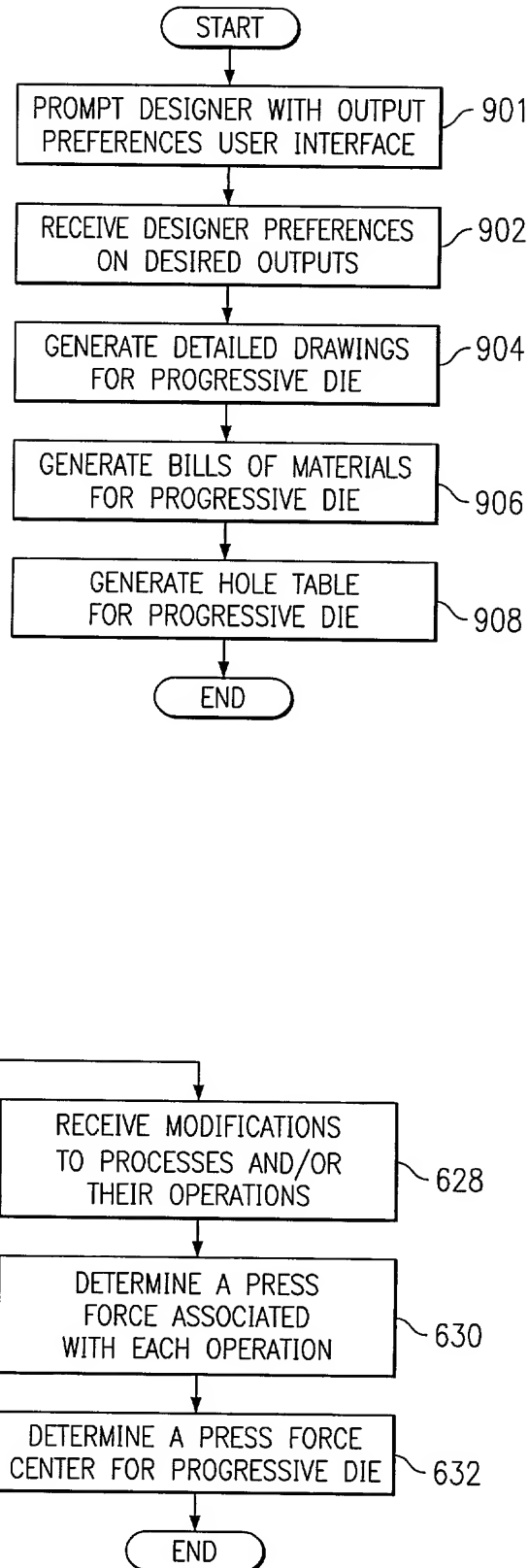


FIG. 9



COMPUTER-AIDED PROGRESSIVE DIE
DESIGN SYSTEM AND METHOD

Inventor: Shengming Liu

7/9

650
FIG. 6B

Scrap Design

Scrap Design Tools

652 653 654 655

651

Select Step

656

Overlap Value 0.0000

Remove Overlap

Select Step

657

Option Menu Rectangle

P1 0.0000

P2 0.0000

P3 0.0000

Remove Overcut

Select Step

Update Scraps

Ok Apply Cancel

FIG. 6C

660

Strip Layout

661 662

Initialize Strip Layout Process Simulation

Process Feature Type 663 ALL

Process Feature Name Station

process_01	1
process_02	2
process_03	3
process_04	3
process_05	5

664

process_01	1
process_02	2
process_03	3
process_04	3
process_05	5

665 667 668 666

Move Insert Idle

Load Design Save Design

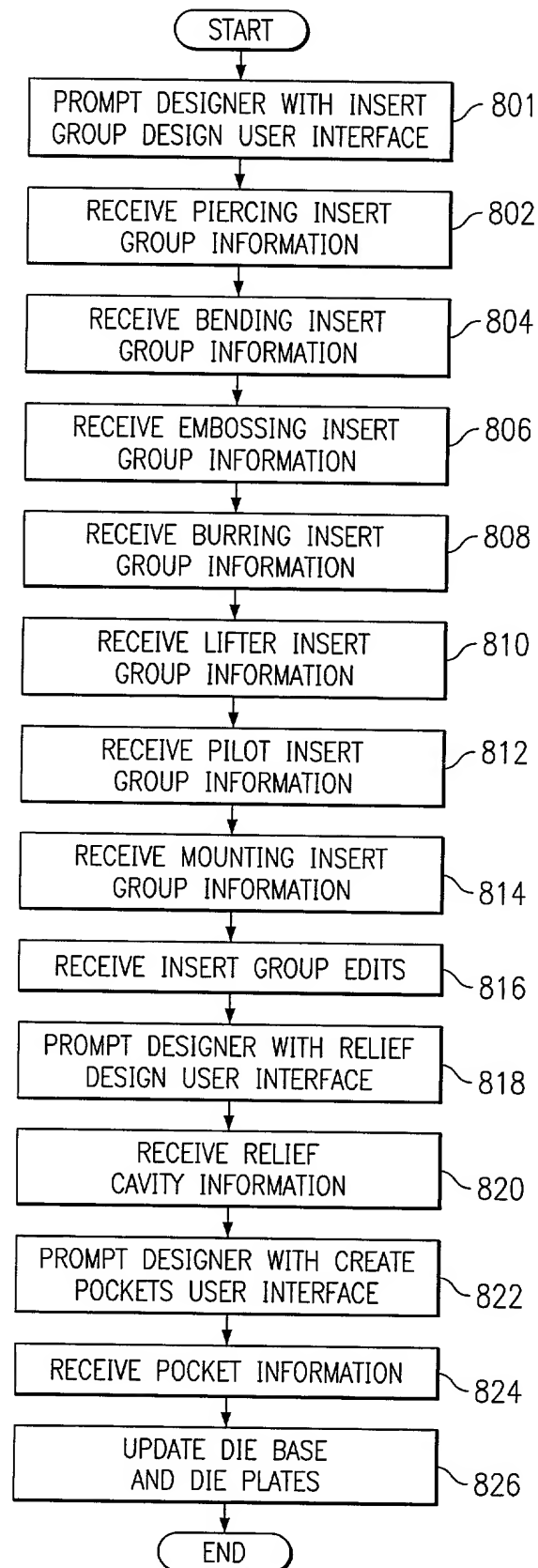
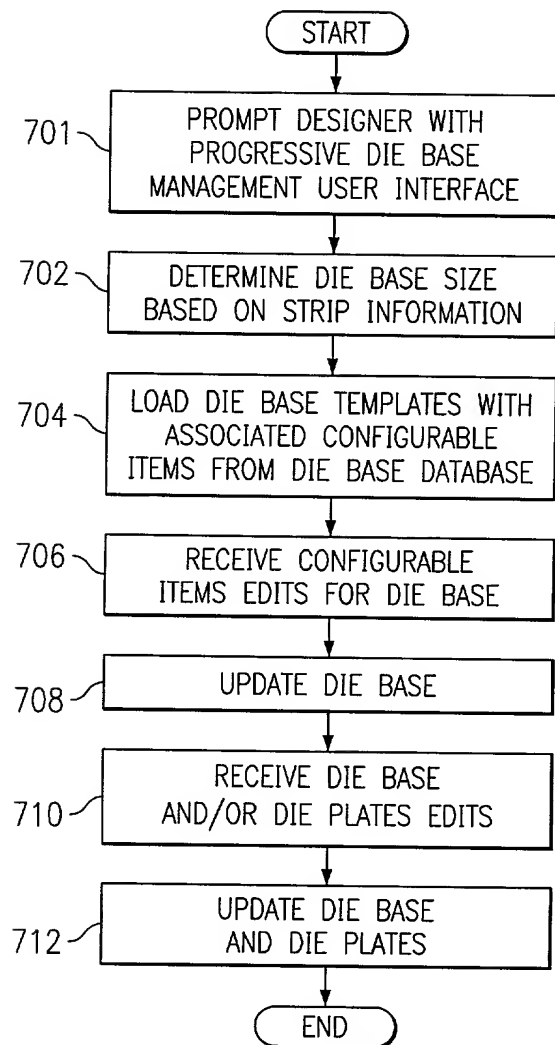
☒ Three Views

Ok Apply Cancel

8/9

FIG. 8A

FIG. 7



COMPUTER-AIDED PROGRESSIVE DIE
DESIGN SYSTEM AND METHOD

Inventor Shengming Liu

9/9

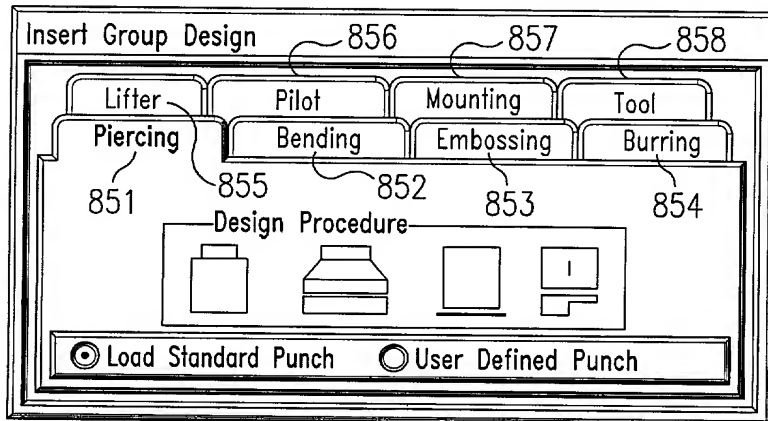


FIG. 8B

850

FIG. 8C

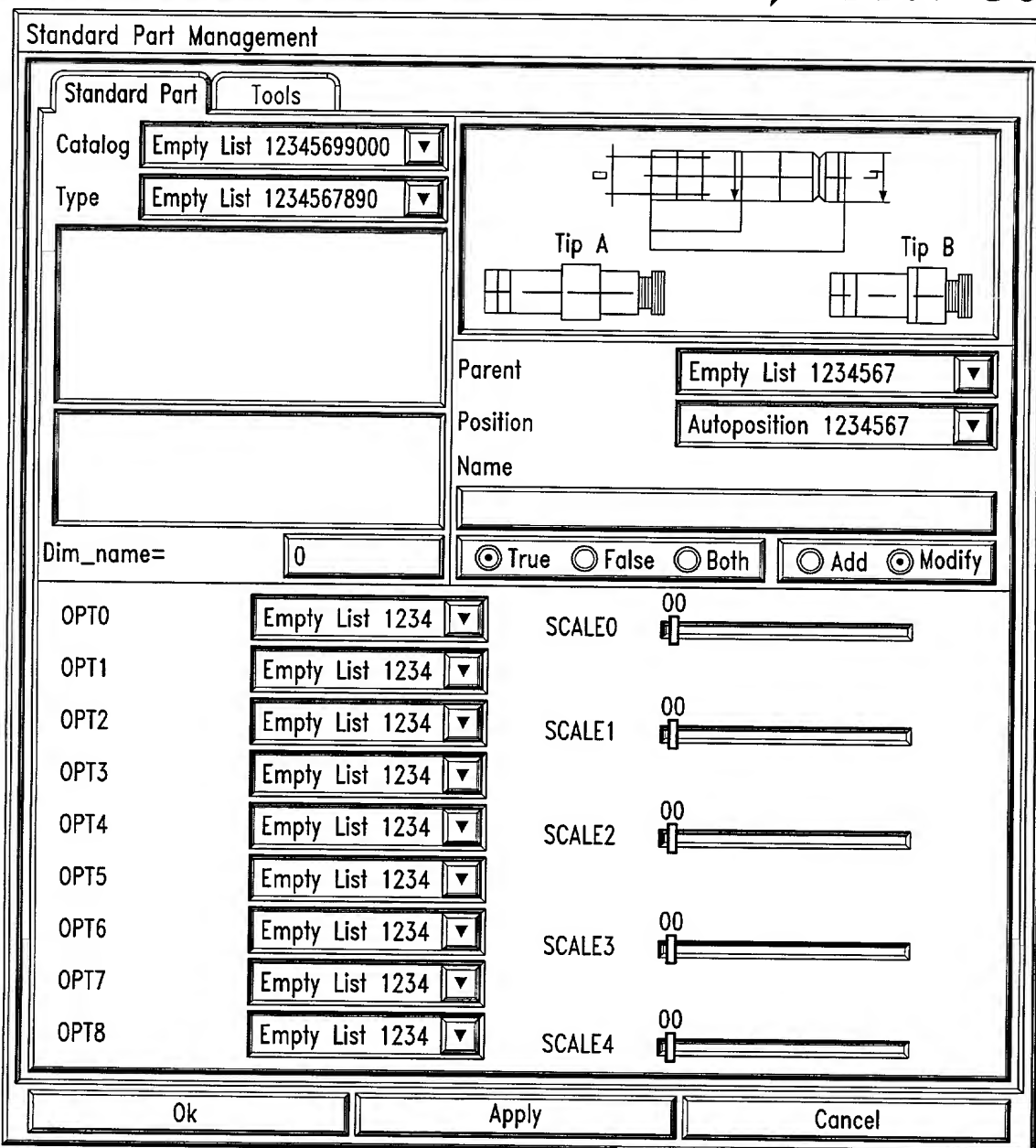


FIG. 8C